

REMARKS

This is a response to the final Office Action mailed on January 7, 2011. No fees are due herewith this response. The Director is authorized to charge any fees that may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 3712036-751 on the account statement.

Claims 1-10 and 26 are rejected in the application. Claims 11-25 were previously withdrawn and are now canceled. Applicants reserve the right to file the withdrawn claims in a divisional application.

In the Office Action, Claims 1-10 and 26 are rejected under 35 U.S.C. §103. In response, Claims 1-10 and 26 have been amended, and Claims 27-31 have been added. The amendments do not add new matter. In view of the amendments and/or for at least the reasons set forth below, Applicants respectfully request that the rejections be reconsidered and withdrawn.

Claims 1-10 and 26 have been amended for clarification purposes.

In the Office Action, Claims 1-4 are rejected under 35 U.S.C. §103(a) as being unpatentable over Viennese NPL ("*Viennese*") in view of DE 10223444 to Guenou ("*Guenou*") and U.S. Publication No. 2002/0130137 to Greenwald ("*Greenwald*"). Applicants respectfully traverse the rejection for at least the reasons set forth below.

Independent Claim 1 has been amended to recite, in part, commanding, via the control and command means, said heating means associated with said support to heat said quantity of alimentary liquid to a predetermined temperature while commanding said driving means for said mechanical stirring means at a first predetermined stirring speed being insufficient to generate foaming of the heated alimentary liquid; and commanding, via the control and command means said mechanical stirring means for stirring said quantity of liquid at a second predetermined stirring speed generating foaming of the heated alimentary liquid. The amendments are supported in the specification, for example, at page 3, line 14 to page 4, line 11.

Because foam is a thermal insulator that could slow down the temperature increase of the liquid, it is thus important to ensure that foam does not form before the alimentary liquid has reached the optimum foam forming temperature, for example, typically comprised between 60 °C and 70 °C in the case of milk. Applicants have found that simultaneously stirring and heating the alimentary liquid comprising milk at a speed, typically of the order of 500 to 1500 rpm,

lower than a stirring speed necessary to generate foam in the alimentary liquid brings the entire volume of the heated alimentary liquid to the optimum foam forming temperature more quickly.

The second predetermined speed is at least twice, preferably three times higher than the first predetermined speed to generate foaming in the alimentary liquid. As previously discussed, the first predetermined speed range is chosen so that a forced convection mode is carried out in the liquid that promotes a more rapid rise of temperature in the liquid but is still low enough to not form foam that would act as a thermal insulator. The second predetermined stirring speed range is selected so that the alimentary liquid that has substantially reached its optimum foam forming temperature level can be changed rapidly into a foam.

In an embodiment, the claimed method can advantageously enable foam to be prepared quickly (i.e., within a few seconds only) from a determined quantity of the alimentary liquid using a mechanical stirring device of simple and economical construction that does not use steam. Thus, the claimed methods eliminate the drawbacks of the prior art devices with respect to the production of steam. Because the device for implementing the presently claimed methods can be made separately from a coffee machine, it is possible to prepare the coffee and the foam simultaneously. See specification, page 3, lines 4-9.

Additionally, the method according to Claim 1 includes the use of a control and command means that may be used to advantageously control both the change of rotational direction of the rotating stirring means and the frequency of the changes. This is achieved by pre-programming a microcontroller with a program that is capable of running various stirring and heating programs depending on a desired container capacity. See specification, page 4, line 36-page 5, line 12. Indeed, the specification states that "control means 24 comprise a microcontroller connected to motor 18 and to the heating element, and suitably programmed for controlling one or more foam producing cycles as a function of the quantity of liquid to be foamed." See specification, page 7, lines 13-31.

Viennese, Guenou and Greenwald alone or in combination fail to disclose or suggest each and every element of independent Claim 1. *Viennese, Guenou and Greenwald* alone or in combination fail to disclose or suggest commanding said driving means for said mechanical stirring means at a first predetermined stirring speed being insufficient to generate foaming of the heated alimentary liquid comprising milk as required by independent Claim 1. *Viennese,*

Guenou and *Greenwald* alone or in combination also fail to disclose or suggest commanding, via the control and command means said mechanical stirring means for stirring said quantity of liquid at a second predetermined stirring speed generating foaming of the heated alimentary liquid comprising milk as required by independent Claim 1.

Viennese discloses a method for making Viennese coffee by adding certain ingredients such as light cream and heavy cream during certain steps. See *Viennese*. The Patent Office even admits that *Viennese* fails to disclose or suggest heating an alimentary liquid comprising milk while stirring. See Office Action, page 3, lines 3-4. In addition to failing to disclose or suggest heating an alimentary liquid comprising milk while stirring, *Viennese* also fails to disclose or suggest mechanically stirring at a first predetermined stirring speed and being insufficient to generate foaming of the heated alimentary liquid comprising milk, or mechanically stirring at a second predetermined stirring speed and generating foaming of the heated alimentary liquid comprising milk in accordance with independent Claim 1. For example, foaming milk is distinguishable from beating a cream.

Guenou discloses a food stirrer that uses controls to set the stirrer speed and the heating plate temperature. See *Guenou*, Abstract. As shown by Figure 3, however, the “controls” of *Guenou* are manual controls that may be set by a user to control the stirrer speed and heating plate temperature. See *Guenou*, Figure 3. At no place in the disclosure, however, does *Guenou* disclose or suggest any of heating the alimentary liquid comprising milk to a predetermined temperature while stirring, or stirring a liquid using stirring means at the recited first or second predetermined stirring speed ranges, or commanding a device using control and command means in accordance with independent Claim 1.

Greenwald discloses using a controller to set a position of a valve to mix both hot and cold coffee to dispense a final coffee product at a desired and predetermined temperature. See *Greenwald*, Abstract; page 6, paragraphs 76-90. At no place in the disclosure, however, does *Greenwald* disclose or suggest any of heating the alimentary liquid to a predetermined temperature while stirring, or stirring a liquid using stirring means at the recited first or second predetermined stirring speed ranges, or commanding a device using control and command means in accordance with independent Claim 1.

Applicants further respectfully submit that the skilled artisan would have no reason to modify *Viennese* with *Guenou* and *Greenwald* to arrive at the present claims in the absence of hindsight. As detailed above, independent Claim 1 is directed to a method of preparing foam from a milk-based liquid that enable form to be prepared quickly (i.e., within a few seconds only) from a determined quantity of liquid using a mechanical stirring device of simple and economical construction that does not use steam. Thus, the method eliminates the drawbacks of the prior art devices with respect to the production of steam. Because the device for implementing the presently claimed methods can be made separately from a coffee machine, it is possible to prepare the coffee and the foam simultaneously. See specification, page 3, lines 4-9. In contrast, *Viennese* merely discloses the steps and ingredients for producing *Viennese* coffee including light and heavy cream and does not even suggest specific devices or means for producing the coffee, let alone specific temperatures, the stirring means or the first and second predetermined stirring speed ranges of the present claims. Further, the controller of *Greenwald* is not even configured to control heating and stirring in accordance with Claim 1, and *Guenou* simply discloses a standard mixer with no thought as to forming foam in an alimentary liquid comprising milk. As such, Applicants respectfully submit that the inventive leap required by the skilled artisan to modify *Viennese* with *Guenou* and *Greenwald* to arrive at the present claims is tenuous at best.

Further, Applicants also respectfully submit that, if the Patent Office could combine references to arrive at the present claims simply because each reference suggests an element of the present claims, then every invention would effectively be rendered obvious. For example, the mere fact that *Viennese* discloses stirring and beating ingredients, *Guenou* discloses a device for stirring and heating a mixture, and *Greenwald* discloses a controller for controlling the dispensing temperature of a coffee, does not mean that the recognition of a method involving providing controlling the heating and stirring speed using a specific control means and specific first and second predetermined stirring speed ranges is necessarily *prima facie* obvious. Indeed, the controller of *Greenwald* is not even configured to control heating and stirring according to Claim 1, and the device of *Guenou* is simply a standard mixer.

What the Patent Office has done is to rely on hindsight reconstruction of the claimed invention. Applicants respectfully submit that it is only with a hindsight reconstruction of

Applicants' claimed invention that the Patent Office is able to even attempt to piece together the teachings of the prior art so that the claimed invention is allegedly rendered obvious. Instead, the claims must be viewed as a whole as defined by the claimed invention and not dissected into discrete elements to be analyzed in isolation. *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983); *In re Ochiai*, 71 F.3d 1565, 1572, 37 USPQ2d 1127, 1133 (Fed. Cir. 1995). One should not use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d at 1075. (Fed. Cir. 1988).

For at least the reasons set forth above, Applicants respectfully submit that the cited references fails to disclose or suggest each and every element of independent Claim 1. Moreover, the cited references fail to teach, suggest or even recognize the advantages and benefits of a method of preparing foam from a milk-based alimentary liquid for preparing a drink using a device according to Claim 1. As a result, independent Claim 1, along with any of the claims that depend from Claim 1, are novel and non-obvious over the cited references.

In the Office Action, Claim 26 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Viennese*. Applicants respectfully traverse the rejection for at least the reasons set forth below.

Independent Claim 26 has been amended to recite, in part, heating the alimentary liquid comprising milk to a predetermined temperature while stirring the liquid with stirring means at a first predetermined stirring speed being insufficient to generate foaming of the heated alimentary liquid; and stirring said liquid with stirring means at a second predetermined stirring speed generating foaming of the heated alimentary liquid. The amendments are supported in the specification, for example, at page 3, line 14 to page 4, line 11.

The method of Claim 26 advantageously enables foam to be prepared quickly (i.e., within a few seconds only) from a determined quantity of liquid using a mechanical stirring device of simple and economical construction that does not use steam. Thus, the method eliminate the drawbacks of the prior art devices with respect to the production of steam. Since the device for implementing the presently claimed methods can be made separately from a coffee machine, it is possible to prepare the coffee and the foam simultaneously. See, specification, page 3, lines 4-9.

Viennese fails to disclose or suggest heating the alimentary liquid comprising milk to a predetermined temperature while stirring the liquid with stirring means at a first predetermined stirring speed being insufficient to generate foaming of the heated alimentary liquid as required by independent Claim 26. *Viennese* also fails to disclose or suggest stirring said liquid with stirring means at a second predetermined stirring speed generating foaming of the heated alimentary liquid comprising milk as required by independent Claim 26.

Viennese discloses a method for making Viennese coffee by adding certain ingredients such as light cream and heavy cream during certain steps. See, *Viennese*. At no place in the disclosure, however, does *Viennese* disclose or suggest heating the alimentary liquid comprising milk to a predetermined temperature while stirring the liquid with stirring means at the recited first predetermined stirring speed range. The Patent Office even admits that *Viennese* fails to disclose or suggest heating while stirring, especially to reach the optimal foam forming temperature level. In addition to failing to disclose or suggest heating while stirring, and as discussed above, *Viennese* also fails to disclose or suggest the second predetermined stirring speed range for generating foaming of the milk in accordance with independent Claim 26. As such, Applicants respectfully submit that *Viennese* fails to disclose or suggest each and every element of independent Claim 26.

Applicants also respectfully submit that the skilled artisan would have no reason to modify *Viennese* to arrive at the present claims. For example, and as discussed above, the present claims are directed to methods of preparing foam from a milk-based liquid that enable foam to be prepared quickly (i.e., within a few seconds only) from a determined quantity of liquid using a mechanical stirring device of simple and economical construction that does not use steam. Thus, the methods eliminate the drawbacks of the prior art devices with respect to the production of steam. Since the device for implementing the presently claimed methods can be made separately from a coffee machine, it is possible to prepare the coffee and the foam simultaneously. See, specification, page 3, lines 4-9. In contrast, *Viennese* merely discloses the steps and ingredients for producing Viennese coffee and does not even suggest specific devices or means for producing the coffee, let alone specific temperatures, the stirring means or the first and second predetermined stirring speed ranges of the present claims. As such, Applicants

respectfully submit that the inventive leap required by the skilled artisan to modify *Viennese* to arrive at the present claims is tenuous at best.

For at least the reasons set forth above, Applicants respectfully submit that the cited reference fails to disclose or suggest each and every element of independent Claim 26. As a result, independent Claim 26, along with any of the claims that depend from Claim 26, are novel and non-obvious over the cited reference.

Accordingly, Applicants respectfully request that the obviousness rejections of Claims 1-4 and 26 be reconsidered and withdrawn.

In the Office Action, Claims 5-7 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Viennese* in view of *Guenou*, *Greenwald* and U.S. Patent No. 6,283,625 to Frankel ("*Frankel*"). Claims 8-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Viennese* in view of *Guenou*, *Greenwald*, *Frankel*, U.S. Patent No. 4,537,332 to Brown ("*Brown*") and U.S. Patent No. 5,374,444 to Langer ("*Langer*"). Applicants respectfully submit that the patentability of Claim 1 as previously discussed renders moot the obviousness rejection of Claims 5-10 that depend from Claim 1. More specifically, the cited references alone or in combination fail to disclose or suggest commanding said driving means for said mechanical stirring means at a first predetermined stirring speed being insufficient to generate foaming of the heated alimentary liquid comprising milk as required by independent Claim 1. The cited references alone or in combination also fail to disclose or suggest commanding, via the control and command means said mechanical stirring means for stirring said quantity of liquid at a second predetermined stirring speed ranging generating foaming of the heated alimentary liquid comprising milk as required by independent Claim 1. Moreover, the cited references alone or in combination fail to disclose or suggest that the first predetermined stirring speed ranges between 500 and 1500 rpm as required by dependent Claim 9 or that the second predetermined stirring speed ranges between 3000 and 10000 rpm as required by dependent Claim 10. In this regard, the cited references fail to teach or suggest the elements of Claims 5-10 in combination with the novel elements of Claim 1.

Applicants further note that Claims 27-31 have been newly added. The new claims are fully supported in the specification, for example, at page 3, line 14 to page 4, line 11. Applicants respectfully submit that Claims 27-31 should be allowed.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly request an early allowance of the same. In the event there remains any impediment to allowance of the claims which could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Respectfully submitted,

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